Marathon City Bridge (Big Rib River Bridge)
Spanning the Big Rib River, on State
Trunk Highway 107
Marathon City
Marathon County
Wisconsin

HAER No. WI-38

HAER WIS, 37-MARA,

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
U. S. Department of the Interior
P. O. Box 37127
Washington, D. C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

HAER WIS, 37 MARA,

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HAER No. WI-38

Location:

Spanning the Big Rib River, on State Trunk Highway 107,

Marathon City, Marathon County, Wisconsin

UTM:

16.275900.4979450

Quad: Marathon

Date of Construction:

1930

Builder/Engineer:

Wausau Iron Works (fabricator and contractor)

State Highway Commission (engineer)

Present Owner:

State Highway Department

Present Use:

Vehicular and pedestrian bridge

Significance:

The Marathon City Bridge is a representative example of a Parker metal overhead truss, one of only 35 left in Wisconsin. The State Highway Commission provided the plans and specifications for the project; the

Wausau Iron Works, one of the most prolific

bridge-building firms in the State, fabricated and erected the 15 span, 721-foot structure. The design is unusual in its dimensioning to accommodate the need for crossing two channels of the Big Rib River Bridge.

Historians:

Diane Kromm

Wisconsin Historic Bridges Recording Project

Summer 1987

Robert Newbery, Historian, Wisconsin Department of Transportation, provided additional information on the

Wasau Iron Works.

Marathon City Bridge (Big Rib River Bridge) HAER No. WI-38 (Page 2)

The Marathon City Bridge, a long-span Parker chord, carries State Trunk Highway 107, over the Big Rib River at the edge of Marathon City. The highway links Marathon City to Wausau, located 11-1/2 miles to the east. The river forks just before reaching the bridge, creating the need for the structure to span two channels. The bridge consists of two Parker overhead truss spans, each 151 feet in length. Thirteen deck girder spans, two at 32 feet length and 11 at 32.5 feet length, separate the two overhead spans. The overall length and width are 721 feet 7 inches times 31 feet 7 inches. The bridge has riveted connections with built-up members. Brackets, cantilevered out from the floor beams, support an 8-foot sidewalk. X-lattice railings run the length of the structure.

Marathon City is located in Marathon County on the Big Rib River. Seven hundred and fifty people lived in the community by the end of the 1920s. November 1928, the Marathon County Board of Supervisors petitioned the State Highway Commission to aid in reconstructing the Marathon City Bridge (the highway was then called State Trunk Highway 29). The previous summer, the State Highway Commission had conducted a bridge survey for the site. existing 1889 structure consisted of two high trusses and one low truss, with a roadway of 16 feet. Masonry abutments supported the bridge with 4x4-feet steel tubes filled with concrete connecting the spans. On December 17, 1928, the commission held a public hearing regarding a new Marathon Bridge. State representatives believed a new bridge would benefit the entire county and recommended a steel and concrete structure be built. The new bridge, they continued, should be built at the present location with similar separated, but connected, units spanning the two channels. The estimated cost of the project was \$110,000.00; the State and Marathon County would each contribute half the amount. The Wausau Iron Works erected the bridge in 1930.2

In 1931, engineers proposed several improvements on the bridge, including a stairway and lampposts, as part of a city park development near the bridge. The bridge has also been subject to maintenance problems. In 1977, engineers requested \$5,600 to repair the overhead lateral struts damaged by a passing truck. Three years later, another truck drive, hauling a high load, caused additional overhead damage.³

WAUSAU IRON WORKS4

The company was established in 1907 as a branch of Northern Boiler and Iron Works of Appleton. In 1908, two brothers, Tony and John Heinzen, bought the facilities and incorporated as the Wausau Iron Works, with the manufacture of boilers as the principal business. In 1910, the company entered into the field of bridge fabricating and erecting and was able to compete successfully with the large Milwaukee firms. That same year, it built a 20,000 square foot facility and, by 1911, the value of the company was \$50,000. It expanded its plant again in 1916 and, by 1926, Wausau Iron Works was worth \$400,000. It expanded its plant facilities again in 1930.

Marathon City Bridge (Big River Bridge) HAER No. WI-38 (Page 3)

In 1919, the company went into concrete paving as an extension of its bridge erecting business. The firm added snowplows in the 1920s through a subsidiary arrangement with E. A. Drott, the State's sales representative for Caterpillar Tractors. Wausau Iron Works dropped its bridge erection and concrete paving business in 1933, apparently in response to a new system of qualifications for bidding on contracts which have been developed by the SHC. According to Elmer Krienke, a former employee of Wausau Iron Works, the State made Wausau get out of the erection aspect of bridge building, probably because contractors complained that the big firms who did both the fabrication and erection had an unfair monopoly. William Fehlandt, a vice president of Wausau Iron Works, took all the erection equipment and set up the Wausau Construction Company, about 1,000 feet west of the iron works. Fehlandt's company did most of the erection work for Wausau Iron Works.

Wausau Iron Works continued to fabricate steel for bridges into the 1950s, but building snow plows and steel warehousing came to be more important. The plant was moved to a new location in Wausau in 1953. The firm legally dissolved in 1984. 10

Wausau Iron Works built two impressive Pennsylvania trusses in Clark County. The earlier one was the Hemlock Bridge on Warner Drive over the Black River, built in 1914. This bridge, featuring a 200-foot long center span, was determined eligible for the National Register of Historic Places in 1980, and a report documenting its significance was prepared prior to its demolition in 1984. In 1938, the firm built the bridge on River Road over the Black River, about 25 miles downstream from the location of the Hemlock Bridge. The River Road bridge is of interest because it appears to use design details of a decade or more earlier. 12

Marathon City Bridge (Big Rib River Bridge) HAER No. WI-38 (Page 4)

FOOTNOTES

- "Iron and Steel Truss Highway Bridges," Barbara Wyatt, editor, in <u>Cultural Resource Management in Wisconsin</u>, vol. 2. (Madison: State Historical Society of Wisconsin, 1986), pp. 12-16; Truss-Bridge Intensive Survey Form for Marathon City Bridge (B-37-579) (Wisconsin Department of Transportation, Bridge Files).
- Wisconsin Gazateer and Business Directory, 1927-1928, listing under Marathon City; Marathon County, Board of Supervisors, Proceedings, 1928-1929, p. 83; (Wisconsin Department of Transportation--Bridge Section, microfilm reel F54); Mary Ann Norton, Marathon County Historical Society, telephone conversation with author, August 25, 1987; Marathon County, Proceedings, 1929-1930, p. 6; Marathon City Bridge Plate (Marathon City).
- Wisconsin Highway Commission, maintenance correspondence regarding the Marathon City Bridge (B-37-549)(Wisconsin Department of Transportation-Bridge Section, microfilm reels F54 and C169).
- Wausau Iron Works, Articles of Incorporation, Amendments, and Dissolutions Papers (Corporation Division, Secretary of State, Madison, Wisconsin).
- "LOED Corporation History," (two page mimeo), September 4, 1975. Emil Krienke Collection, SHSW. LOED Corporation is a successor to Wausau Iron Works. The formal incorporation papers of June 16, 1908, lists three individuals: A. C. Heinzen, Henry Ellenbecker, and Fred W. Krause, and a capital stock of \$25,000. Diane Kromm, "Marathon City Bridge," p. 3.
- 6 Kromm, "Marathon City Bridge," p. 3; "LOED Corporation History."
- 7 Ibid.; State Highway Commission, Minutes, Vol. 13 (January 1, 1931 to July 1, 1931), pp. 91-96; Vol. 15 (January 1, 1932 to July 1, 1932), pp. 66, 129-134.
- 8 Krienke Collection, Tape I, Side 1. "LOED Corporation History" is ambiguous on this point.
- The plans for B-61-014, STH 95 over the Trempeleau River in Trempeleau County, are on microfilm in the Bridge Section, WisDOT, Madison. Originals are in the possession of the author. Other correspondence with Wausau Iron works, relating to bridge construction, is dated as late as 1952. The company continued to advertise its bridge building as late as 1954. Wright's Wausau (Marathon County, Wis.) City Directory, 1950, pp. 23, 284; 1954, pp. 43, 375; 1956, pp. 53, 431; 1958-59, pp. 58, 413; 1960, pp. 68, 514; 1965, pp. 72, 316.

Marathon City Bridge (Rib River Bridge) HAER No. WI-38 (Page 5)

- 10 "Marathon City Bridge," HAER No. WI-38, p. 3.
- Robert S. Newbery, "The Hemlock Bridge," HAER No. WI-15; WisDOT project ID 1000-46-84.
- Robert S. Newbery, Field Inspection Trip, December 21, 1982. Robert Frame, Intensive Survey Form.

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Bridge Plate. Marathon City Bridge.

Marathon County. Board of Supervisors. Proceedings. 1928--1930.

- Norton, Mary Ann, Marathon County Historical Society. Telephone conversation with author, August 25, 1987.
- Truss-Bridge Intensive Survey Form for Marathon City Bridge (B-37-579) (Wisconsin Department of Transportation--Bridge Files).
- Wausau Iron Works. Account Books. (Marathon County Historical Society, Wausau, Wisconsin). No information on the Marathon City Bridge; several volumes are missing, including the year 1930.
- Wausau Iron Works. Articles of Incorporation, Amendments, and Dissolution Papers (Corporation Division, Secretary of State, Madison, Wisconsin).
- Wisconsin Highway Commission. Survey Report, Drawings, Correspondence, relating to Marathon City Bridge (B-37-549) (Wisconsin Department of Transportation--Bridge Section, microfilm reels F54 and C169).
- Wyatt, Barbara, editor. "Iron and Steel Truss Highway Bridges," in <u>Cultural</u>
 Resource Management in Wisconsin, vol. 2. Madison: State Historical
 Society of Wisconsin, 1986.